CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 1-40.
- After this Amendment: Claims 1-40.

Canceled or Withdrawn claims: None.

Amended claims: 1, 7, 9, 11-14, 16, 28, 30, 31, and 36.

New claims: None

Claims:

What is claimed is:

1. (Currently Amended) A method comprising:

servicing a Web request from a Web application;

associating a Globally Unique Identifier (GUID) with the Web request, wherein events which happen during servicing of the Web request can be identified by the GUID which is logged with each of the events;

detecting the occurrence of an event in the servicing of the Web request; and

logging an entry in a trace log, wherein the entry includes:

information descriptive of the occurrence of the event in the servicing of the Web request; and

an Identifier (ID) the GUID corresponding to the Web request.

Serial No.: 10/798,819

Atty Docket No.: MS1-1906US

RESPONSE TO NON-FINAL OFFICE ACTION DATED 9/1/2006



- **2. (Original)** The method as defined in Claim 1, wherein the logging of the entry in the trace log further comprises determining which of the information that is descriptive of the occurrence of the event in the servicing of the Web request to put into the entry as a function of a predetermined level of verbosity.
- **3. (Original)** The method as defined in Claim 1, wherein the entry is logged in the trace log during the servicing of the Web request only when the event is selected from the group consisting of:

the event occurs within the context of a predetermined Universal Resource Locator (URL);

the event pertains of the functionality of authentication;
the event pertains of the functionality of security;
the event pertains of the functionality of compression;
the event pertains of the functionality of a Common Gateway
Interface (CGI);

the event pertains of the functionality of one or more filters; and the event is a predetermined event.

4. (Original) The method as defined in Claim 1, wherein: the entry is logged in the trace log during the servicing of the Web request only when the event pertains to a predetermined filter; and the information includes data going into the predetermined filter and data coming out of the predetermined filter.

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5. (Original) The method as defined in Claim 1, wherein:

the servicing of the Web request from the Web application

comprises executing the Web application that is running on or interfacing

with a server that is servicing the Web request;

the detecting of the occurrence of the event in the servicing of the

Web request comprises detecting the occurrence of the event in the

execution of the Web application that is running on or interfacing with the

server; and

the information descriptive of the occurrence of the event in the

servicing of the Web request comprises the occurrence of the event in the

execution of the Web application.

6. (Original) The method as defined in Claim 1, wherein at

least one of the detecting and the logging are performed by one or more

-5-

components of the operating system of a server.

Serial No.: 10/798,819

Atty Docket No.: MS1-1906US

RESPONSE TO NON-FINAL OFFICE ACTION DATED 9/1/2006

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7. (Currently Amended) The method as defined in Claim 6, wherein:

the server services the Web request from the Web application;

the operating system of the server includes one or more Application Program Interfaces (APIs);

the Web application is executed by, or interfaces with, the server; the Web application interfaces with at least one said API to log a Web application event as a Web application entry in the trace log;

the Web application event occurs within the Web application itself;

the Web application entry includes:

information descriptive of the occurrence of the Web application event in the servicing of the Web request by the server when the Web application is running on, or interfacing with, the server; and

the ID <u>GUID</u> corresponding to the Web request.

8. (Original) The method as defined in Claim 1, wherein:

a server having an operating system services the Web request from the Web application; and

at least one of the detecting and the logging are performed by one or more server applications that are executed by the server.

-6-

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9. (Currently Amended) The method as defined in Claim 8, wherein:

the server services the Web request from the Web application;

the operating system of the server includes one or more APIs;
the Web application is executed by, or interfaces with, the server;
the Web application interfaces with at least one said API to log a
Web application event as a Web application entry in the trace log;

the Web application event occurs within the Web application itself; and

the Web application entry includes:

information descriptive of the occurrence of the Web application event in the servicing of the Web request by the server when the Web application is running on, or interfacing with, the server; and

the ID GUID corresponding to the Web request.

- **10. (Original)** The method as defined in Claim 1, wherein the logging of the entry in the trace log is in response to the detecting of the occurrence of the event in the servicing of the Web request.
- **11. (Currently Amended)** The method as defined in Claim 1, further comprising generating a report containing at least a portion of the information in each said entry for which the ID <u>GUID</u> in the entry matches a supplied ID.

-7-

Serial No.: 10/798,819
Atty Docket No.: MS1-1906US
RESPONSE TO NON-FINAL OFFICE ACTION DATED 9/1/2006



12. (Currently Amended) The method as defined in Claim 11, wherein:

each said entry is in a binary format; and

the generating of the report further comprises using an \underline{ID} \underline{a} \underline{GUID} corresponding to each said event to map the binary format of each said entry into an event description that is in a format that is human readable.

- **13. (Currently Amended)** The method as defined in Claim 1, wherein the <u>ID GUID</u> is the first portion of the entry.
- **14. (Currently Amended)** The method as defined in Claim 1, wherein the <u>ID GUID</u> is unique to the Web request with respect to other said Web requests, and wherein the <u>GUID</u> is 128 bit.
- **15. (Original)** A computer readable medium including machine readable instructions for implementing the method as defined in Claim 1.

-8-

(Currently Amended) A computer-readable medium having stored thereon computer-executable instructions for performing steps comprising:

associating a Globally Unique Identifier (GUID) with a Web request, wherein events which happen during servicing of the Web request can be identified by the GUID which is logged with the events;

servicing a the Web request with a server from a Web application that is executing on the server, wherein during said the servicing multiple logger streams are simultaneously active to log the events as the Web request is being serviced by the server;

detecting the occurrence of each said event the events during the servicing of the Web request by the server; and

logging each said event as an entry of the events as entries in a trace log, wherein each said entry includes:

> information descriptive of the occurrence of the an event; and an event ID corresponding to the event;

a Web request ID the GUID corresponding to the Web request.

The computer-readable medium as defined in **17.** (Original) Claim 16, wherein the step of logging further comprises determining which of the descriptive information to put into the entry as a function of a predetermined level of verbosity.

Serial No.: 10/798,819 Atty Docket No.: MS1-1906US

RESPONSE TO NON-FINAL OFFICE ACTION DATED 9/1/2006



18. (Original) The computer-readable medium as defined in Claim 16, wherein the entry is logged in the trace log during the servicing of the Web request by the server only when the event is selected from the group consisting of:

the event occurs within the context of a predetermined URL; the event pertains of the functionality of authentication; the event pertains of the functionality of security; the event pertains of the functionality of compression; the event pertains of the functionality of a CGI; the event pertains of the functionality of one or more filters; and the event is a predetermined event.

- 19. (Original) The computer-readable medium as defined in Claim 16, wherein the entry is logged in the trace log during the servicing of the Web request by the server only when the event pertains to a predetermined filter, wherein the information includes data going into the predetermined filter and data coming out of the predetermined filter.
- **20. (Original)** The computer-readable medium as defined in Claim 16, wherein the steps further comprise at least one of:

activating the logging when the logging is deactivated; and deactivating the logging when the logging is activated.

Serial No.: 10/798,819 Atty Docket No.: MS1-1906US RESPONSE TO NON-FINAL OFFICE ACTION DATED 9/1/2006

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21. (Original) The computer-readable medium as defined in Claim 20, wherein the activating and the deactivating are performed remotely from the server.

22. (Original) The computer-readable medium as defined in

Claim 20, wherein the trace log is in remote location from the server.

23. (Original) The computer-readable medium as defined in

Claim 16, wherein at least one of the detecting and the logging are

performed by one or more components of an operating system of the

server.

(Original) The computer-readable medium as defined in 24.

Claim 23, wherein:

the operating system of the server includes one or more APIs;

and

the Web application interfaces with at least one said API for the

logging of each said Web application event as an entry in the trace log.

(Original) The computer-readable medium as defined in

Claim 16, wherein at least one of the detecting and the logging are

performed by one or more server applications that are executed by the

server.

Serial No.: 10/798,819

Atty Docket No.: MS1-1906US

RESPONSE TO NON-FINAL OFFICE ACTION DATED 9/1/2006

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-11-

26. (Original) The computer-readable medium as defined in

Claim 25, wherein:

the operating system of the server includes one or more APIs;

and

the Web application interfaces with at least one said API for the

logging of each said Web application event as an entry in the trace log.

27. (**Original**) The computer-readable medium as defined in

Claim 16, wherein the step of logging of the entry in the trace log is in

response to the detecting of the occurrence of the event in the servicing of

the Web request.

28. (Currently Amended) The computer-readable medium as

defined in Claim 16, where the steps further comprise generating a report

containing at least a portion of the information in each said entry for which

the Web request ID GUID in the entry matches a supplied ID.

29. (Original) The computer-readable medium as defined in

Claim 28, wherein:

each said entry is in a binary format; and

the generating of the report further comprises using the event

ID to map the binary format of each said entry into an event description

that is in a format that is human readable.

Serial No.: 10/798,819 Atty Docket No.: MS1-1906US

RESPONSE TO NON-FINAL OFFICE ACTION DATED 9/1/2006

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30. (Currently Amended) The computer-readable medium as defined in Claim 16, wherein the Web request $\frac{1}{10}$ GUID is the first portion of the entry.

31. (**Currently Amended**) The computer-readable medium as defined in Claim 16, wherein the Web request ID <u>GUID</u> is unique to the Web request with respect to other said Web requests, and wherein the

Web request is for at least one of: a static file; a Common Gateway

Interface (CGI); an active server page (ASP).

32. (Original) A facility for tracing a Web request on a network,

the facility comprising:

identifying means for identifying when a predetermined event occurs

in a predetermined Web request when the predetermined Web request is

being serviced; and

a logging means, in communication with the identifying means, for

logging the event, wherein the log of the event includes:

a GUID corresponding to the predetermined Web request;

information descriptive of the occurrence of the

predetermined event when the predetermined Web request is being

-13-

serviced.

Serial No.: 10/798,819

Atty Docket No.: MS1-1906US

RESPONSE TO NON-FINAL OFFICE ACTION DATED 9/1/2006

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- **33. (Original)** A network environment comprising a server servicing Web requests from a Web application while performing Web request-based tracing to produce traces that include a GUID for each Web request and to flow each GUID from the server across to the Web application.
- **34. (Original)** The network environment as defined in Claim 33, further comprising multiple simultaneously active logger streams that are concurrently running on the server and that are each trace-enabled.
- **35. (Original)** The network environment as defined in Claim 34, wherein the server returns each said trace from the multiple logger streams to a corresponding said trace-enabled Web application for which the Web request there from was serviced by the server.

-14-

Serial No.: 10/798,819 Atty Docket No.: MS1-1906US

RESPONSE TO NON-FINAL OFFICE ACTION DATED 9/1/2006

(**Currently Amended**) A server module comprising: 36.

logic configured to service a Web request from a Web application;

logic configured to detect an occurrence of an event in the servicing

of the Web request; and

logic configured to log an entry in a trace log, wherein the entry

includes:

information descriptive of the occurrence of the event in the

servicing of the Web request; and

an ID a Globally Unique Identifier (GUID) corresponding to

the Web request, wherein the GUID is associated with the Web

request, so that events which happen during servicing of the Web

request can be identified by the GUID which is logged with each of

the events.

37. (**Original**) The server module as defined in Claim 36, further

comprising logic configured to determine which of the information that is

descriptive of the occurrence of the event in the servicing of the Web

request to put into the entry as a function of a predetermined level of

verbosity.

Serial No.: 10/798,819

Atty Docket No.: MS1-1906US

RESPONSE TO NON-FINAL OFFICE ACTION DATED 9/1/2006

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(**Original**) The server module as defined in Claim 36, further 38. comprising logic configured to limit the entries in the trace log that correspond to a predetermined said event that is selected from the group consisting of:

the event occurs within the context of a predetermined URL; the event pertains of the functionality of authentication; the event pertains of the functionality of security; the event pertains of the functionality of compression; the event pertains of the functionality of a CGI; the event pertains of the functionality of one or more filters; and the event is a predetermined event.

39. (Original) The server module as defined in Claim 36, wherein:

the entry is logged in the trace log during the servicing of the Web request only when the event pertains to a predetermined filter; and the information includes data going into the predetermined filter and data coming out of the predetermined filter.

(Original) A computer readable medium including machine 40. readable instructions for implementing each said logic of Claim 36.

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